



**United States Environmental Protection Agency
Region I - EPA New England
5 Post Office Square
Boston, MA 02109-3912**

Drafted Date: 10/14/14
Finalized Date: 11/7/14

Subj: Inspection Report

From: Alex Rosenberg

Thru: Denny Dart

To: File

I. Facility Information

Facility Information

A. Facility Name: MBTA Commuter Rail Maintenance Facility,
Somerville MA

B. Facility NAICS:

C. Facility Address: 70 R Third Ave, Somerville MA 02143

D. Facility Contacts: Mary Ann Reilly, EMS Manager
contract operator KEOLIS: 470 Atlantic
Ave., Boston MA
617-293-9662
Maryann.reilly@keoliscs.com
Andrew Brennan, Environmental Manager, MBTA
10 Park Plaza, Boston MA
617-222-1592

E. Type of Source: MSGP SW – Sector P, SPCC applicable

F. Date permit issued:

G. Permit #: OLD - MAR05C014 SW NOI dated Jan 26, 2001
CURRENT – Individual NPDES permit
MA0003590

H. Parent Company: MBTA

II Background Information

A. Date of inspection: 9/24/14

B. Weather Conditions: fair

C. US EPA Representative(s): Alex Rosenberg

- D. State Representative(s): none (notified Muhammad Ahsan, Keven Brander, Joe Narden and Chris Bethlehem from MADEP prior to inspection)
- E. Federally Enforceable Requirements Covered During the Inspection: CWA NPDES permit and SPCC regulations

III. Type and Purpose of Inspection

The purpose of the inspection was to determine compliance with the Massachusetts Bay Transportation Authority ("MBTA") Commuter Rail Maintenance Facility's (the "Facility" or "site") NPDES Permit that focuses on stormwater management. Compliance with SPCC regulations was also inspected for.

All information in this report was provided by either Bill Betters or MaryAnn Reily if not otherwise indicated.

IV. Facility Description

According to environmental management staff at the Facility the MBTA owns the property and contracts operations. MBCR used to be the contract operator and co-permittee on the last NPDES permit. The MBTA has just switched operators to Keolis. The environmental manager for the Facility under MBCR, MaryAnn Reilly, remained in her current position through the transition to Keolis, as did all other MBCR employee. Keolis uses sub-contractors to oversee their operations at the multiple MBTA facilities in the area. CDW consultants, Inc. is responsible for direct operations oversight and permit review (under MBCR these tasks were conducted by Arcadis), and EQ a company that provides sampling, waste hauling and inspection services. Representatives from all three contracting organizations were met at some point during the inspection.

EST, another sub-contractor, has remained responsible for quarterly stormwater inspections and sampling across the operational management transition. CDW uses the same lab as was previously utilized by MBCR for sample analysis.

The Facility maintains and rebuilds parts for the fleet of the MBTA's commuter rail cars in Boston. The facility is operational 24-7 and staffs approximately 400 people. The gates to the facility never close and camera surveillance is on-site.

V. Inspection

Opening Interview

Alex Rosenberg of the EPA entered the site at noon. Earlier in the week Alex Rosenberg had announced the inspection to the Facility EMS manager, Mary Ann Reilly. She and Bill Betters from CDW met Alex at the site and were with the inspector the entire time he was on-site. EPA had conducted a file review prior to the inspection and had therefore requested some documents be made available for review including the 2011 Area

Drainage Study. Alex Rosenberg showed credentials to Facility representatives MaryAnn and Bill.

SPCC and SWPPP plans were presented to Alex during the opening interview. Alex requested a copy of the SPCC plan tank list for the site walk.

Bill explained that Keolis sends monthly compliance reports to Andrew Brennan of the MBTA.

MBTA has hired the consultant Malcolm Pirnie to conduct collection system and drainage evaluations in 2011. Bill believes that the flows that Malcolm and Pirnie estimated are incorrect and believes a re-evaluation might be able to show that there is less of a problem with flooding due to stormwater infrastructure than the 2011 report states is the case.

Keolis maintains the Oil Water Separator (“OWS”) that is located currently on Northpoint’s property. Northpoint bought the land where the OWS is located from Boston and Maine Railroad (a subsidiary of Pan Am Railways) for re-development. Two condominiums are currently being constructed on the site. Historic subsurface oil contamination from the Northpoint property has been previously documented to infiltrate into the chamber of the Oil Water Separator and subsequently discharge through the stormwater outfall pipes managed by MBTA.

Alex Rosenberg mentioned that the permit might need to be modified to no longer include Boston and Maine Railroad as a co-permittee and that the liability for oil contamination remediation could possibly have been transferred to Northpoint. In either case, the fact is that Northpoint is currently installing new stormwater infrastructure for their condominium developments and there may be a possibility to seal off the old OWS and have the subsurface oil contamination be treated as a separate remediation project (pump and treat, etc.).

Alex asked for correspondence from MBCR to MBTA on which alternative they suggested out of the 2011 Collection System Evaluation Report. Mary Ann is confident that MBCR would have made the same recommendations as the consultant Malcolm Pirnie made within the report.

Bill will provide examples to EPA of his monthly compliance reports at a later date. MaryAnn will provide examples of past MBCR SWPPP sampling results. October 15th is the date by which Keolis has to perform their first quarterly stormwater sampling event after having taken control of operations from MBCR on July 1, 2014.

SWPPP Review

Signed on May 25, 2011 by Andrew Brennan and MaryAnn Reilly.

MaryAnn has never joined the contractors during a stormwater sample event. She is familiar with the locations and protocols. Spill coordination within the SWPPP is explained using a flow-chart of people and contact information.

Site Walk

Between the main building and the bulk oil storage tanks there was a pile of white hard mineral looking material on the gravel parking lot medium (slide 4 – see “photo album” for all slide references). Facility staff assumed this was residual salt from the previous winter. Alex recommended that it should be cleaned up and also asked what the site’s snow plowing procedures are. The staff could only guess that a major portion of the snow is plowed to where the pile of salt was observed.

Tank Farm and Delivery Station

The fuel delivery station (slides 5 and 6) is where the majority of oils (lubes, #6, #2) are delivered. The same location is used by haulers to come and pump other liquids off site such as waste oil. The overfill alarm system and pump actuator/meter is housed inside of the building adjacent to the filling station. Prior to Boston and Maine Railroad moving to the adjoining site where an OWS exists, the MBTA Facility’s drains - such as the one underneath the fuel loading area – all flowed through the OWS and eventually to the stormwater outfalls. The drains currently flow to the on-site wastewater treatment plant.

Staff were unable to test the audible overflow alarm due to the fact that the system needs to be on in order to do so. Any fuel delivery must check-in at the office and get a ticket to proceed. Five to ten tanker trucks make fuel deliveries each day.

During monthly SPCC inspections, Bill stated that he and his staff check all alarms. Spills occurred in 2014 from tanks 1, 2 and 3, and subsequently the Facility has met all obligations as set-forth by MASSDEP reportable spill follow-up.

Jason Mains who is a worker in the pipe/sheet metal shop was actively pumping water out of the subterranean housing of the emergency shut-off valves for the above ground bulk diesel fuel tanks. Groundwater leaks into the housing at a rate that creates approximately 1 ft of depth to accumulate each day according to Jason. Therefore, Jason’s routine, to ensure accessibility to the valves is to pump the water out of the well, into the drain at the fuel delivery station, each weekday. The valves usually get submerged over an entire weekend. Alex mentioned that more frequent testing of the valves should be considered due to possible rusting and corrosion from frequent wetting.

Jason stated that he is responsible for discharging stormwater that accumulates in the secondary containment of the bulk tanks. He does not record when he discharges water from the containment. Alex mentioned that this was a requirement of the regulations. Jason did attest that he checks for a sheen before discharging the water. The valves for release water from the secondary containment were closed but not locked

(slide 8 and 9). Alex recommended to lock all valves. The valves were located inside of a locked 8 foot high fence with barbed wire on-top.

Two uncontained 275 gallon totes were located between the largest ASTs and the WWTP (slide 7).

WWTP

All internal drains go to the WWTP that is run by the contractor EQ. The Facility has a separate permit through the MWRA for their discharge from the WWTP.

The upstairs of the WWTP is where all the piping for oil distribution is housed. Tank AST 05 (660 gallon) on the second floor has permanently decommissioned. Alex recommended that this be labeled on the tank and that all inlets and outlets be blanked off.

The waste oil hauler arrived while the inspection group was entering the WWTP entrance. The entrance was filled with ten 55-gallon drums (two designed for liquid and the rest for solid wastes) (slide 10). The waste oil hauler was pumping the contents (waste oil) out of each of the drums, being overseen by Bob Santosuosso, the WWTP operator for over 10 years. Bob stated that when he gets a “good” number (usually four) of waste oil drums from the different parts of the facility he calls the hauler to come and pump them out. He tries to keep the labels up-to-date. One of the drums that was observed was mis-labeled due to the fact that it had not yet had the old label blacked out.

Bob stated that the WWTP had not had a violation in all of the 10 years he has operated it. The treatment system is essentially a large holding tank which can act as an OWS (referred to as the sludge tank) and then a second treatment tank that flows water through a process to remove metals and adjusts the pH using ultra filters. The filters can each be removed and replaced separately.

Two waste streams enter the treatment plant from processing areas inside the shops. Wastestream 1 (WW1) is from the truck shop. Wastestream 2 (WW2) is the main flow in terms of volume and comes to the head-works via an oil rope-skimmer. WW2 comes primarily from the train wash bays.

Tank Farm 2

A second bank of large (8,000 gallon) ASTs is located adjacent to (to the south of) the entrance to the WWTP (slide 11 and 12). AST 03 was incorrectly labeled when compared to the SPCC plan list of tanks - a different type of fuel product is actually being stored in it. AST 04 is the real new waste oil AST.

Numbering of the tanks on site (not within the SPCC plan) was completed last week. The final technical revision of the SPCC plan is scheduled to be completed in December of 2014.

The waste oil tank is filled via pumping out of a holding tank inside the shop. The inspector questioned staff who would hear the overfill alarm from all the way inside the shop. Staff stated that the tank was usually kept only at about 3000 gallons out of its 8000 gallon capacity and therefore the shop's holding tank (with a capacity well below 5000 gallons) would not be able to over-fill it.

A new system of distributing lube oil has been active at the Facility for approximately 1 year. The new methodology is to have a delivery truck fill 275 gallon totes in the 'stores' area (slides 15) and then have a fork-lift bring them to all the different areas within the buildings that need lube oil. The stores area is undercover but is outside in an open-air environment and uncontained (slide 17). Totes and drums were also located outside of this covered area in the parking lot (slides 13 and 14). It was recommended by the inspector to include this process in the SPCC plan. Mary Ann says that the current practice has been in existence for four years.

Exterior

16 drums were observed empty and uncontained outside of the main building. Mary Ann stated that the facility's hauler recently stopped accepting them without removing their top. The current plan is to have EQ take the drums for recycling.

Inspector recommended to label the day tank of the generator.

Two lube oil totes of 275 gallon capacity were observed in the stores building uncontained. Outside of the *stores* there were 5 drums and 3 totes. The totes each had greater than 1 inch of oil product inside them.

Two dumpsters were located outside the *stores* area and were uncovered (slides 19-20). Signs indicated that one was for metal scraps and the other for metal turnings (labeled "wheel true chips" – slide 21). Evidence of oily water discharging from the scrap metal dumpster was observed. Evidence that leachate containing metals from the metal turnings dumpster has occurred was brown staining emanating from the dumpster and continuing down gradient toward the stormwater catchbasin (slide 22). Alex Rosenberg informed the facility representatives that dumpsters are required to be covered by the multi-sector general permit for stormwater associated with industrial practices.

A third uncovered dumpster was observed (slide 23) closer to the old wastewater treatment building that contains old brake pads.

Shops

The bridge and building shop has a welding area where two 55-gallon drums lacked secondary containment.

The paint shop had two drums on a spill palette. Sodium metasilicate and carbonate washed are used in this shop and are allowed to evaporate after use.

The vehicle maintenance garage was visited (slides 24 and 25).

The truck shop has one uncontained and two contained drums in it. The question was raised about whether the drums with the clip closure tops only need to be restricted to storing solids for DOT on-road transport, or also for SPCC storage requirements (i.e. can oil be stored on-site in a 55-gallon drum that has a clip top).

The wastewater stream W1's holding tank located in the diesel shop that collects wastewater from the pit drains has a sump pump control panel that warns staff not to pump if an oil spill occurs (slide 28). Alex mentioned that this procedure is an important part of the containment process for the above ground storage tanks (ASTs) located throughout the diesel shop and should be explicitly mentioned in SPCC plan.

Accumulation of waste oil from specific maintenance activities in the pits is collected in satellite accumulation containers (slide 29) and is then pumped with hoses located in each pit (slide 30) to the double walled 8,000 gallon AST 13. There is also the ability to pump directly from the pits to the wastewater W1 outlet.

There were two full 275-gallon oil totes in the periodic maintenance room (slide 31).

A hazardous waste and material storage staging area (slide 31) was created in 2014. Twenty 55-gallon drums were stored there. The area may not yet be specified in plans.

Service and Inspection Building (S&I)

Lube oil totes were located between the cars in the S&I building (slide 33) with small pumps to the rail cars.

Wash Bay

A lube oil tote was located in the wash bay. The wash bay drains to the wastewater catchment W2, through an Oil Water Separator ("OWS") and then to the WWTF. Alex mentioned that they should try and keep oil storage containers in the wastewater W1 catchment area because of the fact that a sump pump is needed to be manually turned before water is sent to the WWTF from W1.

Rail Drip Pans

Oil drip pans on the rails outside (slide 38) of the maintenance buildings lead to one of two OWS (east or west) that then go to the Prison Point OWS and out the stormwater outfalls.

Prison Point OWS

Two other employees (one from EQ and one from Keolis) came to open man-holes and give the inspection group access to the Prison Point OWS. The two upstream manholes to the OWS, one labeled 'Oil Drain', were opened. Nobody in the inspection group was able to identify the catchment area of the influent pipes that were observed.

All the OWS on-site (4 in total) are checked monthly. Mike, the employee who conducts these checks, was present and affirmed this fact.

The system of chambers surrounding the Prison Point OWS were inspected (slides 35-37). The facility now has the ability to measure the combined stormwater flows from their property and the city of Somerville at the new coffer dam. The facility samples stormwater from their property before it mixes with Northpoint's runoff.

Exit Interview

A Notice of SPCC Inspection with Deficiencies form was signed by the facility staff and was copied. Form requires that facility respond in writing with plan to comply with SPCC regulations within 30-days.

EPA inspector mentioned that he would probably communicate with Andrew Brennan of the MBTA and the MASSDEP officials to understand the plans for implementing the 2011 Collection System recommendations.

MaryAnn will look for communications with MBTA about plan revision timelines.

Bill will send EPA examples of SPCC tank alarm testing.

EPA will send to the facility the reference in the multi-sector general permit that requires the minimization of stormwater pollutants by covering exposed materials (dumpsters).

MaryAnn will send EPA the last three SWPPP quarterly inspection.

Inspector left the WWTP facility at approximately 2:30PM.